

**Remarks/Arguments:**

Claims 1-6, 8-13, 15-18 and 20 are pending. Claims 7, 14 and 19 have been canceled.

Claims 21-24 are newly added.

**Information Disclosure Statement:**

Applicants thank the Examiner for acknowledging the IDS filed on December 5, 2003.

**Drawings:**

Applicants thank the Examiner for accepting the drawings filed on December 5, 2003.

**Allowable Subject Matter:**

Claims 7-9, 14, 15 and 19 have been objected-to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicants have now incorporated the features of claim 7 into claim 1. Claim 7 has now been canceled.

The dependency of claim 8 has been amended, so that it depends from claim 1. Claim 9 depends from claim 8.

The features of claim 14 have been incorporated into claim 11. Claim 14 has now been canceled.

The dependency of claim 15 has been amended, so that it depends from claim 11.

The features of claim 19 have been incorporated into claim 17. Claim 19 has now been canceled.

Applicants respectfully submit that amended claim 1, amended claim 11 and amended claim 17 are now in condition for allowance.

Claims 2-6 and 8-10 depend from amended claim 1, claims 12-13 and 15-16 depend from amended claim 11, and claims 18 and 20 depend from amended claim 17. These dependent claims are now also in condition for allowance.

**Newly Added Claims 21-24:**

Newly added claim 21 includes features similar to original claim 1, and in addition includes the following features:

- (c) forming multi-dimensional samples of **multi-dimensional weighted vectors** ...
- (d) sorting the multi-dimensional samples into a plurality of data clusters, **based on their respective geometric proximity to a**

**center of a data cluster, each center representing a  
classification of a radar emitter.**

Basis for amending step (c) of claim 21 may be found, for example, in claims 4 and 5. Basis for amending step (d) may be found, for example, in now canceled claim 7. Canceled claim 7 includes "assigning a multi-dimensional sample to a data cluster, based on a Euclidean distance between the multi-dimensional sample and a center of the data cluster". Step (d) of claim 21 is similar to features of claim 7, except that the sorting is based on a **geometric proximity** to a center of the data cluster (**not a Euclidean distance** to the center). Furthermore, claim 8 recites "forming the center of a data cluster as a mean vector of a set of multi-dimensional samples assigned to the data cluster".

Hawkins, on the other hand, discloses a system and method for separately tracking, identifying and providing a relative direction (DF) to various transmitters. A signal detector detects signals based on their respective power spectrum, and associates each signal with a signal cluster based on its respective power spectrum. Other circuitry tracks and identifies the RF transmitters by examining the pulse duration, pulse frequency and pulse phase of each of the detected signals.

Hawkins, however, does **not** disclose or suggest forming multi-dimensional samples where each sample includes different weighted vectors. Furthermore, Hawkins does **not** suggest sorting these multi-dimensional samples into several data clusters, based on their respective **geometric proximity to a center of the data cluster**. Favorable consideration is requested for newly added claim 21.

Newly added claims 22-24 are, respectively, similar to original claims 2, 3 and 5. These dependent claims are, therefore, not subject to rejection in view of Hawkins for at least the same reasons set forth for newly added claim 21. Favorable consideration is respectfully requested.

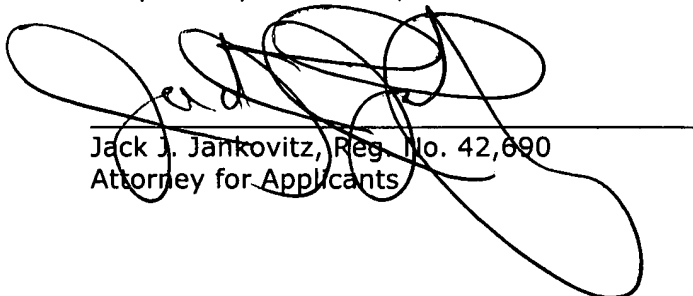
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Reply to Office Action of September 16, 2005

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**Conclusion**

Claims 1-6, 8-13, 15-18 and 20-24 are in condition for allowance.

Respectfully submitted,



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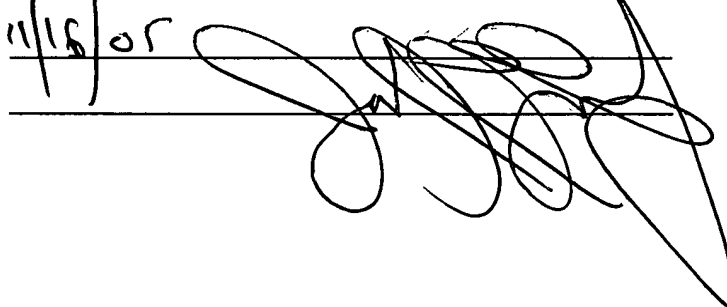
Dated: November 16, 2005

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